

What Is Claimed Is:

- 1 1. A method of transmitting information comprising transmitting video-coded
2 information over a network at a priority level that is determined based on
3 feedback from the network.
- 1 2. The method of claim 1, wherein the feedback comprises a response to a
2 request for information on whether the network currently has available
3 capacity to transmit additional high priority traffic.
- 1 3. The method of claim 1, wherein said transmitting video-coded
2 information comprises:
3 receiving a frame of video data to be encoded;
4 requesting permission to send high priority data over the network;
5 receiving a response to the request for permission to send high
6 priority data; and
7 encoding and transmitting the frame as a high priority video-coded
8 frame if permission was granted to send high priority data.
- 1 4. The method of claim 3, wherein said transmitting video-coded
2 information further comprises encoding and transmitting the frame as a
3 low priority frame if permission was not granted to send high priority
4 data.

1 5. The method of claim 3, wherein said transmitting video-coded
2 information further comprises deleting the video-coded frame from
3 transmission if permission was not granted to send high priority data.

1 6. The method of claim 1, wherein said transmitting video-coded
2 information comprises:

3 requesting permission to transmit high priority data;

4 encoding and buffering a high priority video frame at substantially
5 the same time as said requesting permission to transmit high priority
6 data;

7 transmitting the encoded video frame over the network as high
8 priority data if permission to send high priority data was granted; and

9 deleting the encoded video frame from transmission if permission
10 to send high priority data was not granted.

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1 7. The method of claim 1, wherein said transmitting video-coded
2 information comprises:
3 encoding as high priority frames all video frames that are to be
4 transmitted;
5 for each of said coded frames:
6 requesting permission to send high priority data;
7 transmitting the frame as a high priority frame if permission
8 to transmit high priority data was granted; and
9 transmitting the frame as a low priority frame if permission
10 to transmit high priority data was not granted.

1 8. The method of claim 7, wherein the high priority frames are transmitted
2 over the network separately than the low priority frames, wherein the
3 high priority frames are transmitted over the network using a guaranteed
4 quality of service trunk, and wherein the low priority frames are
5 transmitted over the network on a best-effort truck.

1 9. The method of claim 1, wherein said transmitting video-coded
2 information comprises:
3 encoding a plurality of frames as either high priority frames or low
4 priority frames according to a priority selection algorithm;
5 receiving information about loss of low priority frames by the
6 network; and
7 if more than a threshold amount of low priority frames are being
8 lost, encoding an additional number of the frames as high priority frames
9 than is dictated by said algorithm, wherein said additional high priority
10 frames are encoded at a lower quality than is generally used for high
11 priority frames.

1 10. A method for transmitting video-coded information, the method
2 comprising:
3 receiving video data to be coded into a video-coded frame;
4 requesting information relating to a network's available capacity to
5 sending high priority data;
6 receiving capacity information in response to said request; and
7 transmitting the video data as a video-coded base layer frame if
8 the capacity information indicates that the network has capacity available
9 to send high priority data.

1 11. The method of claim 10, wherein the method further comprises
2 transmitting the video data as a video-coded enhancement layer frame if
3 the capacity information indicates that the network does not have
4 capacity available to send high priority data.

1 12. The method of claim 10, wherein base layer frames are transmitted over
2 the network separately than enhancement layer frames, wherein base
3 layer frames are transmitted over the network using a guaranteed quality
4 of service trunk, and wherein the enhancement layer frames are
5 transmitted over the network on a best-effort truck.

1 13. The method of claim 10, wherein the method further comprises deleting
2 the video data without transmitting said video data if the capacity
3 information indicates that the network does not have capacity available
4 to send high priority data.

1 14. The method of claim 10, wherein the video data is encoded as a base
2 layer frame and buffered at substantially the same time as said
3 requesting information relating to the network's available capacity, and
4 wherein said buffered frame is deleted if the capacity information
5 indicates that the network does not have capacity available to send a
6 high priority data.

1 15. The method of claim 10, wherein received video data is coded as a base
2 layer frame prior to receiving information relating to the network's
3 available capacity, and wherein said buffered frame is transmitted as an
4 enhancement layer frame if said information indicates that the network
5 does not have capacity available to send a high priority data.

1 16. A method of transmitting video-coded information over a network
2 comprising:
3 determining that a candidate base layer frame is available to be
4 encoded; and
5 before encoding the candidate base layer frame, requesting
6 permission from the network to send high priority data.

1 17. The method of claim 16, wherein the method further comprises:
2 receiving a response from the network to the request which
3 response provides permission to send high priority data;
4 coding the candidate base layer frame as a base layer frame; and
5 transmitting the coded base layer frame over the network.

1 18. The method of claim 16, wherein the method further comprises:
2 receiving a response from the network to the request which
3 response denies permission to send high priority data;
4 coding the candidate base layer frame as an enhancement layer
5 frame; and
6 transmitting the coded enhancement layer frame over the
7 network.

1 19. The method of claim 16, wherein the method further comprises:
2 receiving a response from the network to the request which
3 response denies permission to send high priority data; and
4 deleting the candidate base layer frame.

1 20. A method of transmitting video-coded information over a network
2 comprising:
3 determining that a candidate base layer frame is available to be
4 encoded;
5 requesting permission from the network to send high priority data;
6 encoding the candidate base layer frame and buffering the
7 encoded frame at substantially the same time as requesting permission
8 from the network to send high priority data;
9 transmitting the buffered frame as a base layer frame if
10 permission to send high priority data is granted; and
11 transmitting the buffered frame as an enhancement layer frame if
12 permission to send high priority data is denied.

1 21. The method of claim 20, wherein base layer frames are transmitted over
2 the network separately than enhancement layer frames, wherein base
3 layer frames are transmitted over the network using a guaranteed quality
4 of service trunk, and wherein the enhancement layer frames are
5 transmitted over the network on a best-effort truck.

- 1 22. A method of transmitting video-coded information over a network
2 comprising:
- 3 receiving a plurality of video frames to be coded;
4 for all of the video frames received:
- 5 requesting permission from the network to transmit a high
6 priority frame;
- 7 coding the video frame as a high priority frame;
8 transmitting the coded frame as a high priority frame if
9 permission to transmit a high priority frame is received; and
10 transmitting the coded frame as a low priority frame if
11 permission to transmit a high priority frame is denied.
- 1 23. The method of claim 22, wherein requesting permission from the network
2 and coding the video frame are done at substantially the same time.

- 1 24. A method of transmitting video-coded information from an encoder over
2 a network comprising:
- 3 receiving information from the network on how much bandwidth is
4 allocated to the encoder for high priority frames;
5 encoding a plurality of frames as either high priority frames or low
6 priority frames according to a priority selection algorithm and based upon
7 said received bandwidth information;
- 8 receiving information about loss of low priority frames by the
9 network; and
- 10 if more than a threshold amount of low priority frames are being
11 lost, encoding an additional number of the frames as high priority frames
12 than is dictated by said algorithm, wherein said additional high priority
13 frames are encoded at a lower quality than is generally used for high
14 priority frames.

- 1 25. The method of claim 24, wherein information about loss of low priority
2 frames by the network is received as network feedback.

- 1 26. The method of claim 24, wherein information about loss of low priority
2 frames by the network is received using Real Time Control Protocol.